

Glossary and Acronyms

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Horseshoe crab eggs

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Glossary

40% Migratory Bird Hunting Rule:	“if a refuge, or portion thereof, has been designated, acquired, reserved, or set apart as an inviolate sanctuary, we may only allow hunting of migratory game birds on no more than 40 percent of that refuge, or portion, at any one time unless we find that taking of any such species in more than 40 percent of such area would be beneficial to the species (16 U.S.C. 668dd(d)(1)(A), National Wildlife Refuge System Administration Act; 16 U.S.C. 703-712, Migratory Bird Treaty Act; and 16 U.S.C. 715a-715r, Migratory Bird Conservation Act).
Abiotic:	Not biotic; often referring to the nonliving components of the ecosystem such as water, rocks, and mineral soil.
Access:	reasonable availability of and opportunity to participate in quality wildlife-dependent recreation.
Accessibility:	the state or quality of being easily approached or entered, particularly as it relates to complying with the Americans with Disabilities Act.
Accessible facilities:	structures accessible for most people with disabilities without assistance; facilities that meet UFAS standards; ADA-accessible [E.g., parking lots, trails, pathways, ramps, picnic and camping areas, restrooms, boating facilities (docks, piers, gangways), fishing facilities, playgrounds, amphitheaters, exhibits, audiovisual programs, and wayside sites.]
Acetylcholinesterase:	An enzyme that breaks down the neurotransmitter acetylcholine to choline and acetate. Acetylcholinesterase is secreted by nerve cells at synapses and by muscle cells at neuromuscular junctions. Organophosphorus insecticides act as anti-acetyl cholinesterases by inhibiting the action of cholinesterase thereby causing neurological damage in organisms.
Actinorhizal plants:	These plants have the ability to form nitrogen fixing nodules that confers a selective advantage in poor soils. Actinorhizal plants are characterized by their ability to form a symbiosis with the nitrogen fixing actinomycete <i>Frankia</i> , an association that leads to the formation of nitrogen-fixing root nodules. Most actinorhizal plant species are tree and scrub species that pioneer or colonize disturbed soils where available nitrogen is scarce. Several native shrubs and trees play this critical role in enriching the soil and enabling the establishment of other native plants in natural ecological succession. An example of an actinorhizal plant on the refuge is sweetgum.
Activity:	What visitors do at a national wildlife refuge. The economic benefits to local communities of refuge visitation report (<i>Banking on Nature</i>) identifies visitor activities being grouped into hunting, fishing, and non-consumptive uses.
Adaption:	adjustment to environmental conditions
Adaptive Management:	The process of implementing policy decisions as scientifically driven management experiments that test predictions and assumptions in management plans, and using the resulting information to improve the plans.

Adventive:	A species native to North America but not to Delaware that is now found growing in Delaware outside of its natural range. Adventive species are not considered to be part of Delaware's native flora and are treated as alien species in statistical summaries. These species are usually introduced by human-caused breakdowns of natural barriers to dispersal. In most cases, adventive species have not yet become widely or well established and may or may not be a threat to indigenous plant communities in Delaware. Adventive species also include plants that have been introduced, or intentionally planted in Delaware and are now escaping and surviving without cultivation.
Aestivation:	Also known as "summer sleep" is a state of animal dormancy somewhat similar to hibernation. It takes place during times of extreme heat and dryness. Invertebrates (like crabs and especially many insect species) and vertebrate animals are known to enter this state to avoid damage from high temperatures and the risk of desiccation. Both terrestrial and aquatic animals undergo aestivation (from Latin <u>aestas</u> = summer).
Afforestation:	is establishing a forest on land that is not a forest, or has not been a forest for a long time by planting trees or their seeds. The term reforestation refers to the reestablishment of the forest after its removal, or planting more trees in the same place after timber harvest.
Agricultural Land:	Nonforested land (now or recently orchards, pastures, or crops)
Alternative:	a set of objectives and strategies needed to achieve refuge goals and the desired future condition.
Amphipods:	A group of nocturnal macroinvertebrates belonging to the order of Amphipoda and known as scuds, side-swimmers or freshwater shrimp. They range in size from 5-20 mm long and are restricted to cool, shallow water marshes and generally are found in permanent wetland habitats. They are important protein food sources for waterfowl.
Anadromous Fish:	Fish that spend their adult lives in the sea but swim upriver to fresh water to breed (striped bass, American shad, river herring, and sturgeon).
Annual:	a plant that flowers and dies within one year of germination
Appropriate Use:	<p>a proposed or existing use on a refuge that meets at least one of the following three conditions:</p> <ol style="list-style-type: none">1. the use is a wildlife-dependent one;2. the use contributes to fulfilling the refuge purpose(s), the System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the National Wildlife Refuge System Improvement Act was signed into law; or3. the use has been determined appropriate as specified in section 1.11 of that act.

Approved Acquisition Boundary:	a project boundary that the Director of the U.S. Fish and Wildlife Service approves upon completion of the planning and environmental compliance process. An approved acquisition boundary only designates those lands which the Service has authority to acquire or manage through various agreements. The approval of an acquisition boundary does not grant the Service jurisdiction or control over lands within the boundary, and it does not make lands within the refuge boundary part of the National Wildlife Refuge System. Lands do not become part of the System until the Service buys them or they are placed under an agreement that provides for their management as part of the System.
Aquatic:	growing in, living in, or dependent upon water.
Aquifer:	An underground layer of permeable rock, sediment (usually sand or gravel), or soil that yields water. The pore spaces in aquifers are filled with water and are interconnected, so that the water flows through them. Aquifers can range from a few square kilometers to thousands of square kilometers in size.
Area of Emphasis:	(AOE) priority public uses (hunting, fishing, environmental education, interpretation, wildlife observation, or photography) on a refuge that will be most effective in providing quality opportunities for visitors on that refuge. Every refuge has two AOE's, which were determined based on careful consideration of natural resources, existing staff, operational funds, and existing and potential facilities.
Area-sensitive Species:	Species that require large areas of contiguous habitat.
Assemblage:	In conservation biology, a predictable and particular collection of species within a biogeographic unit (ecoregion or specific habitat type).
ASMFC:	Atlantic States Marine Fisheries Commission is a compact of the 15 Atlantic states created to "promote the better utilization of the fisheries, marine, shell and anadromous, of the Atlantic seaboard by the development of a joint program for the protection and conservation of such fisheries." The Commission conducts interstate fisheries management by coordinating the conservation and management efforts of 22 Atlantic coastal fish species and species groups--- to maintain healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration in progress by the year 2015.
Avian:	of or having to do with birds
Avian Influenza:	or "bird flu" is a disease caused by a virus that infects birds, including pets, domestic poultry, and wild birds.
Baiting:	the direct or indirect placing, exposing, depositing, distributing, or scattering of salt, grain, or other feed that could lure or attract wildlife to, on, or over any areas where hunters are attempting to take them.
Basin:	The land surrounding and draining into a water body (cf "watershed").
Benthos:	Plants and animals that live on the bottom of aquatic environments.

BCC 2002 = Birds of Conservation Concern:	A list develop in 2002 by the United States Fish and Wildlife Service to adhere to the mandate of the Fish and Wildlife Conservation Act, that instructs the Service to “identify species, subspecies, and populations of all migratory nongame bird that, without additional conservation actions are likely to become candidates for listing under the Endangered Species Act of 1973.” The BCC 2002 list identifies both migratory and non-migratory bird species beyond those already designated as federally threatened or endangered, that represent the Services highest conservation priorities requiring proactive conservation action to survive.
Bioconcentration:	A process resulting in concentration of persistent, fat-soluble compounds like PCBs, DDT, and methyl mercury in organisms at successively higher trophic levels of a food chain or web.
Biogeography:	The scientific study of the geographic distributions of organisms.
Biological diversity or Biodiversity:	The variety of life and its processes; it includes the variety of living organisms, the genetic differences among them, the communities and ecosystems in which they occur, and the ecological and evolutionary processes that keep them functioning in a healthy manner, yet ever changing and adapting. An ecosystem has greater biodiversity when it contains more species.
Biological Integrity:	Biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that genomes, organisms, and communities.
Biological Oxygen Demand (BOD):	<p>is a chemical procedure for determining how fast biological organisms use up oxygen in a body of water. It is used in water quality management and assessment, ecology and environmental science. BOD is not an accurate quantitative test, although it is often used as an indication of the quality of a water source. It is listed as a conventional pollutant in the U.S. Clean Water Act. BOD measures the rate of oxygen uptake by micro-organisms in a sample of water at a temperature of 20° C and over an elapsed period of five days in the dark.</p> <p>Typical BOD values: most pristine rivers will have a BOD below 1 mg/L. Moderately polluted waters will range from 2 to 8 mg/L, while municipal sewage that is treated in a three-stage process would have a BOD ~ 20 mg/L or less.</p>
Biomass:	The total mass or amount of living organisms in a particular area or volume
Biota:	All of the organisms, including animals, plants, fungi, and micro-organisms, found in a given area.
Biotic Impoverishment:	Loss of biota and biotic processes; virtually synonymous with the loss of biodiversity.
Blind Site:	a designated area identified by a numbered marker where hunting is permitted; hunters can camouflage themselves in the area’s natural vegetation, through the use of boat blinds, or construct temporarily construct ground blinds to reduce the chance of detection by sought after game.
Bog:	A wetland type characerterized by saturated, acidic soil and peat accumulating due to poorly drained area rich in plant residues, usually surrounded by an area of open water, and having characteristic and diverse flora and fauna.

BP:	“Before the Present” (Pre-contact eras are often given in either calendar years (B.C. and A.D.) or in years “before the present.” BP is a notation developed as part of the radiocarbon-dating process and indicates a calibrated point measured from 1950. For example, 4950 BP is approximately the same as 3,000 B.C., while 200 BP is about the same as 1750 A.D. This approximation is necessary because there are correction factors used for BP dates, while there are none for calendar dates.
Brackish:	Having a salinity between that of fresh and sea water (saltier than fresh, but not as salty as sea).
Breeding Habitat:	Habitat used by migratory birds or other animals during the breeding season.
Buffer Zones:	Land bordering and protecting critical habitats or water bodies by reducing runoff and non-point source pollution loading; areas created or sustained to lessen the negative effects of human disturbance on animals, plants, and their habitats. Buffers are usually areas of permanent vegetation adjacent to a wetland or waterway that help prevent sediments and contaminants from entering wetlands and waterways.
Bug:	In lay terms the word bug refers to tiny creatures that crawl along, such as insects like spiders and millipedes. But for scientists the word has a much narrower meaning. In the strictest terms bugs are insects that have mouthparts adapted for piercing and sucking. The mouthparts of bugs are contained in a beak-shaped structure. So scientists would classify water boatmen, water striders or a cockroach as a bug but not a beetle. In fact scientists call lice and their relatives true bugs in the order HEMIPTERA to distinguish them from what everyone else calls bugs.
Bryophytes:	A member of a large group of seedless green plants including the mosses, liverworts, and hornworts. Bryophytes lack the specialized tissue xylem and phloem that circulate water and dissolved nutrients in the vascular plants. Bryophytes generally live on land but are mostly found in moist environments as they have free-swimming sperm that require water for transport. In contrast, the gametophyte (haploid) generation of bryophytes constitutes the larger plant form, while the smaller sporophyte (diploid) generation grows on or within the gametophyte and depends upon it for nutrition.
Candidate Species:	Species for which we have sufficient information on file about their biological vulnerability and threats to propose listing them.
Canopy:	the layer of foliage formed by the crowns of trees in a stand. For stands with trees of different heights, foresters often distinguish among the upper, middle and lower canopy layers. These represent foliage on tall, medium, and short trees. The uppermost layers are called the overstory.
Carbon sequestration:	is a geoengineering technique for the long-term storage of carbon or other forms of carbon, for the mitigation of global warming. Carbon dioxide is usually captured from the atmosphere through biological, chemical or physical processes. It has been proposed as a way to mitigate the accumulation of greenhouse gasses in the atmosphere released by burning fossil fuels. For example, reforestation of croplands has greater potential for carbon sequestration as carbon dioxide is transferred from the air and stored into the new biomass of trees for a longer period of time.
Catadromous fish:	Fish that migrate downstream in the direction of the sea, usually to reproduce like the American eel.

C & D Canal:	In 1824, the construction of the Chesapeake and Delaware Canal began. The new route shortened the distance between Philadelphia and Baltimore by 300 hundred miles. Completed in 1829, the Canal was 19 miles long (13.6 miles through Delaware), 10 feet deep by 36 feet wide.
Cenozoic:	The geological era that began 65 million years ago and extends to the present. It followed the Mesozoic Era and is subdivided into the Tertiary and Quaternary periods. The Cenozoic is also known as the Age of Mammals as these animals evolved to become an abundant, diverse and dominant group. Birds and flowering plants also flourished.
CFR:	Code of Federal Regulations.
Chronic Wasting Disease:	a contagious neurological disease affecting deer, elk and moose. It causes a characteristic spongy degeneration of the brains of infected animals resulting in emaciation, abnormal behavior, loss of bodily functions and death.
Combined Sewer Overflow:	A pipe that during storms, discharges untreated wastewater from a sewer system that carries both sanitary wastewater and stormwater. The overflow occurs because the system does not have the capacity to transport and treat the increased flow caused by stormwater runoff.
Community:	All the organisms---plants, animals, and microbes---that live in a particular habitat and affect one another as part of the food web or through their various influences on the physical environment. Communities in nature are convenient groupings of different organisms regularly found in the same place at the same time.
Community Type:	A particular assemblage of plants and animals, named for its dominant characteristic.
Compatible Determination:	Means a written determination signed and dated by the Refuge Manager and Regional Chief, signifying that a proposed or existing use of a national wildlife refuge is a compatible use or is not a compatible use. The Director makes this delegation through the Regional Director.
Compatible Use:	Means a proposed or existing wildlife-dependent use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife System mission or the purpose(s) of the national wildlife refuge.
Comprehensive Conservation Plan:	Means a document that describes the desired future conditions of a refuge or planning unit and provides long-range guidance and management direction to achieve the purposes of the refuge; helps fulfill the mission of the Refuge System; maintains and, where appropriate restores the biological integrity, diversity and environmental health of each refuge and the Refuge System; helps achieve the goals of the National Wilderness Preservation System; and meets other mandates.

Conifer:	Belonging to the phylum of seed-bearing plants (Coniferophyta) comprising of trees and shrubs that include pines, firs and spruces. Conifers have an extensive fossil record going back to the late Devonian (geological period in the Palaeozoic era dating 408 to 360 million years ago) and are typically evergreen trees inhabiting cool temperate regions with leaves reduced to needles or scales. The wood of conifers, is called softwood in contrast to the hardwood of angiosperm trees. In tradition systems of classification conifers were classified as the Gymnospermae, but now are divided into separate phyla: Coniferophyta (conifers), Cycadophyta (cycads), Ginkophyta (ginkgo), and Gnetophyta.
Conservation:	Means management activities used to sustain and, where appropriate, restore and enhance, health populations of fish, wildlife, and plants utilizing, in accordance with applicable Federal and State laws, methods and procedures associated with modern scientific resource programs. Such methods and procedures include protection, research, census, law enforcement, habitat management, propagation, live trapping and transplantation, and regulated taking as per the provisions of the Endangered Species Act.
Conservation Agreements:	written agreements among two or more parties for the purpose of ensuring the survival and welfare of unlisted species of fish and wildlife or their habitats or to achieve other specified conservation goals. Participants voluntarily commit to specific actions that will remove or reduce threats to those species.
Conservation Biology:	The biological science that studies the dynamics of diversity, scarcity, and extinction. It is a modern applied science for maintaining the earth's biological diversity and is a cross-disciplinary field that applies the principles of ecology, biogeography, population genetics, economics, biology, sociology, and anthropology to the maintenance and restoration of biodiversity. Conservation biology is a "mission-oriented" science and its goal is to conserve natural systems and biological diversity.
Conservation Easement:	A legal agreement between a landowner and a land trust (that is, a private, nonprofit conservation organization or government agency) that permanently limits the uses of a property to protect its conservation values.
Consultation:	a type of stakeholder involvement in which decision makers ask stakeholders to comment on proposed decisions or actions.
Consumptive, wildlife-oriented recreation:	hunting and fishing
Cookie Cutter:	a floating machine designed to maintain and cut thick infestation of aquatic weeds and unconsolidated bottom material in marsh ditches by spreading the cut material out over the marsh. It will not cut through consolidated sediment, logs, or stumps.
Cool-Season Grass:	introduced grass for crop and pastureland that grows in spring and fall and is dormant during hot summer months.
Cooperative agreement:	a usually long-term habitat protection action, which can be modified by either party, in which no property rights are acquired. Lands under a cooperative agreement do not necessarily become part of the National Wildlife Refuge System
Corridor:	A more or less continuous connection between adjacent and similar habitats; examples in a landscape context include hedgerows, streams, and irrigation ditches.

Critical Habitat:	According to Federal Law, the ecosystem(s) upon which endangered and threatened species depend.
Cultigen:	An organism, especially a cultivated plant, such as the banana, not known to have a wild or uncultivated counterpart.
Cultural Resource Inventory:	<p>a professional study to locate and evaluate evidence of cultural resources within a defined geographic area</p> <p>[N.b. Various levels of inventories may include background literature searches, comprehensive field examinations to identify all exposed physical manifestations of cultural resources, or sample inventories for projecting site distribution and density over a larger area. Evaluating identified cultural resources to determine their eligibility for the National Register follows the criteria in 36 CFR 60.4 (cf. FWS Manual 614 FW 1.7).]</p>
Cultural Resource Overview:	<p>a comprehensive document prepared for a field office that discusses, among other things, project prehistory and cultural history, the nature and extent of known cultural resources, previous research, management objectives, resource management conflicts or issues, and a general statement of how program objectives should be met and conflicts resolved</p> <p>[An overview should reference or incorporate information from a field offices background or literature search described in section VIII of the Cultural Resource Management Handbook (FWS Manual 614 FW 1.7).]</p>
Cumulative effects:	The combined effects of all management and other human activities on a defined area of land, a body of water, or both.
Database:	a collection of data arranged for ease and speed of analysis and retrieval, usually computerized
Dbh:	(diameter at breast height) — the diameter of the stem of tree measure at breast height (usually 4.5 feet above the ground). The term is commonly used by foresters to describe tree size.
Deer Hunting Stand:	a permanent, elevated structure used in hunting to reduce the chance of detection by deer.
Degradation:	the loss of native species and processes due to human activities such that only certain components of the original biodiversity persist, often including significantly altered natural communities
Designated Wilderness Area:	an area designated by Congress as part of the National Wilderness Preservation System [FWS Manual 610 FW 1.5]
Desired Future Condition:	the qualities of an ecosystem or its components that an organization seeks to develop through its decisions and actions.
Diadromous Fishes:	Fish species that use both marine and freshwater habitats during their life cycle. Species can be anadromous , living primarily at seas but migrating to freshwater habitats to spawn, or catadromous , living in freshwater creeks, ponds and rivers but migrating out to seas to spawn. The anadromous strategy is far more common and examples of refuge focal management species that are anadromous include alewives, blueback herring and striped bass; while the catadromous strategy is less common but exemplified by American eel.

Diapause:	A period of insect inactivity and reduced physiological function induced by environmental factors; occurs often in larval, caterpillar, or chrysalis stages.
Digitizing:	the process of converting maps into geographically referenced electronic files for a geographic information system (GIS)
Dieldrin:	A chlorinated hydrocarbon ($C_{12}H_8Cl_6O$), used as an insecticide and in mothproofing.
Disturbance:	is a change in environmental conditions, which interferes with the functioning of a biological system. It is reflected by any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment and biological environment. Disturbance at a variety of spatial and temporal scales is a natural, and even essential component of many communities and is a key concept used in restoration ecology.
Disturbance Cycles:	Periodic recurrence of particular natural disturbances such as fire or flooding.
Diversity:	Ecological measure of the number of species and their relative abundance (evenness) in a community; a low diversity refers to relatively fewer number of species or more even abundance.
Donation:	a citizen or group may wish to give land or interests in land to the Service for the benefit of wildlife. Aside from the cost factor, these acquisitions are no different than any other means of land acquisition. Gifts and donations have the same planning requirements as purchases.
Drawdowns:	the drainage (dewatering) of a wetland corresponding to regional growing season lengths. In the mid-Atlantic region the growing season ranges from 160 to 280 days in length. The period of time during which drawdowns occur helps determine soil moisture, vegetative response, and wetland productivity. Slower drawdowns (> 30 days) are more desirable for plant production, invertebrate response and wildlife use (See Moist Soil Management).
Duck Hunting Blind:	a permanent blind camouflaged with switch grass used in hunting to reduce the chance of detection by waterfowl.
Duff:	Decomposed ground forest litter or humus. The forest floor, also called duff, is one of the most distinctive features of a forest ecosystem. It consists of shed vegetative parts such as leaves, branches, bark, stems, etc., existing in various stages of decomposition above the soil surface. Composed not only of inorganic material, it also teems with a wide variety of faun and flora. It is one of the richest components of the forest ecosystem from the standpoint of biodiversity because of large numbers of decomposers and predators on invertebrates, fungi, algae, bacteria and archaeobacteria (single-celled microorganisms).
Easement:	An agreement by which landowners give up or sell one of the rights on their property [landowners may donate rights-of-way across their properties to allow community members access to a river (cf. "conservation easement)].
Ecoregion:	A territory defined by a combination of biological, social, and geographic criteria, rather than geopolitical considerations; generally, a system of related, interconnected ecosystems.

Ecosystem:	A dynamic complex of plant, animal, fungal, and microorganism communities and their associated nonliving (abiotic) environment interacting as an ecological unit; two primary axioms defining ecosystem structure and function are (1) recycling of essential elements, including biomass in different trophic levels following characteristic spatial and temporal patterns in each ecosystem type; and (2) certain emergent properties of self-regulation and self sustaining elements.
Ecosystem Approach:	A strategy or plan to manage ecosystems to provide for all associated organisms, as opposed to a strategy or plan for managing individual species, by considering environmental information based on boundaries of ecosystems like watersheds, rather than on geopolitical boundaries.
Ecosystem Dysfunction:	Disruption of functioning of ecological processes in an ecosystem.
Ecosystem Management:	Any land-management system that seeks to protect viable populations of all native species, perpetuate natural-disturbance regimes on a regional scale, adopt a planning timeline of centuries, and allow human use at levels that do not result in long-term ecological degradation.
Ecosystem Service:	A benefit or service provided free by an ecosystem or by the natural environment, such as clean water, flood mitigation, or groundwater recharge.
Ecotone:	A transitional zone between two (or more) ecological communities, as between a forest and wetland or river and its estuary. An ecotone has its own characteristics in addition to sharing certain features of the other communities; also known as edge-effect.
Ecotourism:	Visits to an area that maintains and preserves natural resources as a basis for promoting its economic growth and development.
Edaphic:	Of or relating to the soil, especially as it affects living organisms. In ecology, edaphic refers to plant communities that are distinguished by soil conditions rather than by the climate.
Emergent Wetland:	wetlands dominated by erect, rooted, herbaceous plants
Endangered Species:	a Federal- or State-listed protected species in danger of extinction throughout all or a significant portion of its range
Endemic:	(n) A species or race native to a particular place and found only there. (adj.) Restricted to a specified region or locality.
Environment:	The sum total of all biological, chemical, and physical factors to which organisms are exposed. We usually think of the environment as everything that surrounds us: air, soils, ocean, bay, wetlands, grasslands, forests, creeks, streams, ponds, birds, animals, insects, plants, fish, reptiles, amphibians
Environmental Assessment:	(EA) a public document that discusses the purpose and need for an action, its alternatives, and provides sufficient evidence and analysis of its impacts to determine whether to prepare an environmental impact statement or a finding of no significant impact [40 CFR 1508.9].
Environmental Education:	curriculum-based education aimed at producing a citizenry that is knowledgeable about the biophysical environment and its associated problems, aware of how to help solve those problems, and motivated to work toward solving them

Environmental Health:	Composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the natural biotic processes that shape the environment.
Environmental Impact Statement:	(EIS) is a detailed, written analysis of the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible commitment of resources.[40 CFR 1508.11].
Environmental Justice:	refers to inequitable environmental burdens borne by groups such as racial minorities, women, residents of economically disadvantaged areas, or residents of developing nations. Environmental justice proponents generally view the environment as encompassing where we live, work, and play (sometimes “pray” and “learn” are also included) and seek to redress inequitable distributions of environmental burdens (pollution, industrial facilities, crime, etc.) and equitably distribute access to environmental goods such as nutritious food, clean air and water, parks, recreation, health care, education, transportation, etc.
EPT Index:	A widely used measure of environmental condition. This simple index is calculated as the number of different kinds of Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). The EPT Index is useful because most of the species in these three orders of aquatic insects are sensitive to pollution and environmental stress. Of the three sensitive orders, Ephemeroptera and Trichoptera larvae are most useful for biomonitoring pollution and serve as reliable indication that the aquatic environment is healthy.
Ericaceous:	Pertaining to a heath, or vegetation characteristics of low fertility, acidic, poorly drained soils, dominated by small leaved shrubs or Ericaceae (heathers and heaths) and Myrtaceae (myrtles).
Estuary:	A coastal water body, with tidal mixing, where fresh water from rivers mixes with salt water from the ocean.
Eutrophication:	The process during which a water body becomes highly loaded with nutrients, (primarily nitrogen and phosphorous), often causing oxygen depletion from unconsumed algal production.
Exotic:	Species that occur in a given place, area, or region as the result of direct or indirect, deliberate or accidental introduction of the species by humans.
Extant:	Now living; not destroyed or lost; not extinct.
Extinction:	the termination of existence of a lineage of organisms (e.g., a subspecies or species.
Extirpation:	Local extinction; a species or subspecies disappearing from a locality or region without becoming extinct throughout its range.
Fauna:	all animal life associated with a given habitat, country, area, or period

Federal Lands Recreation Enhancement Act:	(REA) this Act, Public Law 108-447 (118 Stat. 2809), allows the government to charge a fee for recreational use of public lands managed by the Bureau of Land Management (BLM), the Bureau of Reclamation (BOR), the Fish and Wildlife Service (FWS), the National Park Service (NPS) and the Forest Service (USFS). The recreation fee program is a program by which fees paid by visitors to certain federal recreation sites are retained by the collecting site and used to improve the quality of the visitor experiences at those sites.
Federal-listed species:	a species listed either as endangered, threatened, or a species at risk (formerly, a “candidate species”) under the Endangered Species Act of 1973, as amended
Federal Trust Resource:	A resource that the Government holds in trust for the people through law or administrative acts. Federal trust resources are nationally and internationally important, like endangered species, migratory birds and fish that regularly move across state lines. They also include cultural resources protected by Federal historic preservation laws, and nationally important or threatened habitats, like wetlands, navigable waters, and public lands like national wildlife refuges.
Federal Trust Species:	All species where the Federal government has primary jurisdiction including federally endangered or threatened species, migratory birds, anadromous fish, and certain marine mammals.
Fee-Title Acquisition:	The acquisition of most or all of the rights to a tract of land; a total transfer of property rights with the formal conveyance of a title. While a fee-title acquisition involves most rights to a property, certain rights may be reserved or not purchased, including water rights, mineral rights, or use reservation.
Final Demand:	The total spending by final consumers on all goods. The amount reported in Banking with Nature as the change in spending by final consumers in a given region attributable to refuge visitation. Final demand includes spending by people who earn income from refuge visitors’ activities as well as spending by refuge visitors themselves.
Finding of No Significant Impact:	(FONSI) supported by an environmental assessment, a document that briefly presents why a Federal action will have no significant effect on the human environment, and for which an environmental impact statement, therefore, will not be prepared. [40 CFR 1508.13]
Fire Regime:	The distinctive frequency, intensity, and spatial distribution of natural fires within a given locality, habitat-type or ecoregion.
Fish Consumption Advisories:	a public notice issued by the Delaware Department of Natural Resources and Environmental Control and the Delaware Department of Health and Social Service’s Division of Public Health about the presence of chemical toxins in the flesh of finfish and shellfish taken from Delaware waters and the associated health risk to anglers and their families who consume their catch.
Fish Weir:	A means of providing safe upstream and downstream passage for migrating fish around a barrier.
Floodplain:	Flat or nearly flat lands that may be submerged by floodwaters; a plain built up or in the process of being built up by stream or tidal deposition.

Flora:	In botany, flora of a given area refers to all the plant life occurring in a given place or time that is naturally occurring or indigenous (native) plants.
Friends Group:	Any formal organization whose mission is to support the goals and purpose of its associated refuge and the National Wildlife Refuge Association overall; “friends” organizations and cooperative and interpretive associations.
Flyway:	any one of several established migration routes of birds
Focal Species:	a species that is indicative of particular conditions in a system (ranging from natural to degraded) and used as a surrogate measure for other species of particular conditions. An element of biodiversity selected as a focus for conservation planning or action. The two principal types of targets in Conservancy planning projects are species and ecological communities.
Foraging:	searching for food.
Forbs:	Flowering plants (excluding grasses, sedges, and rushes) that do not have a woody stem and die back to the ground at the end of the growing season.
Forest Ecology:	Is the scientific study of the interrelated patterns, process, flora, fauna, and ecosystems of land dominated by trees. The management of forests is silviculture.
Forested Wetlands:	wetlands dominated by trees
Forest Association:	A woodland community described by a group of dominant tree species that also occurs with other tree species.
Founder Effects:	Nonselective changes in the genetic makeup of a colonizing population during its establishment by a few founding individuals.
Fragmentation:	The disruption of large and contiguous habitats into isolated and small patches. Fragmentation has two negative components for biota: the loss of total habitat area, and the creation of smaller, more isolated patches with no connectivity.
FY:	Fiscal Year is from October 1 to September 30.
Geographic Information System:	(GIS) a computerized system to compile, store, analyze and display geographically referenced information [E.g., GIS can overlay multiple sets of information on the distribution of a variety of biological and physical features.]
Grassland:	A habitat type with landscapes dominated by native grasses and forbs and with biodiversity characterized by species with wide distributions, and plant communities are easily maintained with periodic mowing or burning. In such systems larger vertebrates, birds, invertebrates, reptiles and amphibians make extensive use of these areas which are rare today on the landscape.
Groundwater:	water in the ground that is in the zone of saturation, from which wells and springs and groundwater runoff are supplied

Guild:	A group of organisms, not taxonomically related, but are ecologically similar in characteristics such as food preferences, behavior, or microhabitat requirement, or similar in their ecological role or niche in general.
Habitat:	<p>The place or type of site where species and species assemblages are typically found and/or successfully reproduce.</p> <p>[N.b. An organism's habitat must provide all of the basic requirements for life, and should be free of harmful contaminants.]</p>
Habitat Fragmentation:	<p>the breaking up of a specific habitat into smaller, unconnected areas</p> <p>[N.b. A habitat area that is too small may not provide enough space to maintain a breeding population of the species in question.]</p>
Hardwood Species:	Tree species characterized by broad, flat leaves, as distinguished from coniferous or needle-leaved trees. Oak, cherry, maple, and hickory are examples.
Harvest Information Program:	(HIP) is a method by which your state wildlife agency and the U.S. Fish and Wildlife Service are developing more reliable estimates of the number of all migratory birds harvested throughout the country. These estimates give biologists the information they need to make sound decisions concerning hunting seasons, bag limits, and population management.
Hemi-marsh:	Diverse stands of emergent vegetation intermixed with equal areas of open water. This creates edge within the marsh, providing attractive habitat for waterfowl.
Herptile (plural herptiles):	This term is used to encompass both reptiles and amphibians, especially in situations where a member of either group of animals is meant without excluding the other. <i>Etymology:</i> From <i>herpetology</i> (<i>the branch of zoology that deals with the study of reptiles and amphibians</i>), by blending with <i>reptile</i> .
Historic Conditions:	Composition, structure, and functioning of ecosystems resulting from natural processes that based on sound professional judgment, were present before substantial human related changes happened to the landscape. The historic conditions benchmark, for the purposes of restoring biological integrity, diversity and environmental health, is the post-Pleistocene, pre-European time period of 800 AD to 1800 that serves as the “ historic conditions ” benchmark containing a range of historic variability.
Historic Range of Variability :	(HRV) is a description of the change over time and space in the ecological condition of potential natural vegetation types and the ecological processes that shape those types. Potential natural vegetation types represent native vegetation types and characteristics that would occur when natural disturbance regimes and biological processes occur without human intervention as a reference point to maintain and/or restore biological integrity, diversity, and environmental health.

Holocene:	The most recent geological epoch of the Quaternary period, or the end of the Pleistocene up to the present. It follows the final glacial episode of the Pleistocene and is sometimes referred to as the Postglacial epoch. The Holocene is the most often used ecosystem reference point when considering historical conditions and ecology and its application to ecosystem restoration. The Holocene comprises the past 10,000 years of the earth's history, or the period following the last glaciation (the Wisconsinan) during which the surface of North American took its modern form. The Holocene climatic event marks the last synchronous global disturbance that affected every element of the environment from sea levels to soil-forming processes to the distribution of plants and animals, including humans. The Holocene is when several human cultures began to move away from foraging and harvester-based economies into agriculturally based economies. (Egan and Howell 2001 <i>in The Historical Ecology Handbook: A Restorationist's Guide to Reference Ecosystems</i>)
Hundreds:	The Hundreds of Delaware: The term "Hundred" denotes a political sub-division. It is an archaic method of dividing an area into administrative unit. About 1682, each Delaware county was subdivided into "hundreds." It denoted an area in which 100 men resided who could be easily mustered for service to the king. The term therefore designated an area in which 10 families with 10 members resided. "Hundreds" continued to represent an assessment or tax district which became the basis of the electoral districts which were created in Delaware's 1897 constitution. Similar to a township which serves as a county's administrative district in other states, the "hundreds" designation is unique to Delaware.
Hydrology:	The scientific study of terrestrial water, in particular inland water before its discharge into the oceans or evaporation into the atmosphere. It includes the study of the occurrence and movement of water and ice on or under the earth's surface and its reactions with the environment and biota. The science has many important applications in flood control, irrigation, domestic and industrial uses, hydroelectric power and natural resource management.
Hyper-eutrophic:	A physical, chemical, and biological condition that results after a lake, an estuary, or slow-flowing watercourse receives excessive inputs of plant nutrients (mostly nitrates and phosphates) as a result of erosion and runoff from the surrounding land basin.
Hypogeous:	Relating to the germination of a seed in which the cotyledons (embryonic leaves) remain below the surface of the ground.
Impact:	(<i>Banking on Nature</i> definition): The new economic activity generated in a region as a refuge attracts non-residents to the area, This figure represents economic activity that would be lost if the refuge were not there.
Impoundment:	An area of tidal marsh that has been cut off from tidal inundation through the construction of dikes, dams, or water control structures.
Indicator species:	A species whose presence, absence, or relative well-being in a given environment is a sign of the overall health of its ecosystem. By monitoring the condition and behavior of an indicator species, scientists are likely to affect other species that are more difficult to study.
Indigenous:	Native to a particular area.

Indigenous species:	a species that, other than a result as an introduction, historically occurred or currently occurs in a particular ecosystem
Interagency Passport:	<p>The Recreation Enhancement Act (REA) established the “America the Beautiful – the National Parks and Federal Recreational Lands Pass” (Interagency Pass Program) to promote consistency among the participating federal agencies and to create a high-quality pass program that is supported by the public and partner organizations. The Interagency Pass Program provides four pass options for the public to use at Federal recreation sites where entrance or standard amenity fees are charged. The four passes that make up the program are:</p> <p>Interagency Annual – Available to anyone 16 years and older at an annual cost of \$80; Interagency Senior – Available to US residents and citizens 62 years old and older at a cost of \$10 (lifetime); Interagency Access – free (lifetime) and available to US residents/citizens with a permanent disability; and Interagency Volunteer – Available to anyone who volunteers over 500 hours at one of the participating agencies.</p>
Interjurisdictional Fish:	Are those “...populations that two or more states, nations, or Native American tribal governments manage because of their geographic distribution or migratory patterns (710 FW 1.5 H). Examples include anadromous species of river herring, salmon and free-roaming species endemic to large river systems, such as sturgeon and paddlefish. [USWFS Director’s Order No. 132, Section 6(C)]
Interpretation:	The National Association of Interpreters defines “interpretation” as a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource.
Interpretive facilities:	<p>structures that structures that provide information about an event, place, or thing by a variety of means, including printed, audiovisual, or multimedia materials</p> <p>[E.g., kiosks that offer printed materials and audiovisuals, signs, and trail heads.]</p>
Interpretive Materials:	<p>any tool used to provide or clarify information, explain events or things, or increase awareness and understanding of the events or things</p> <p>[E.g., printed materials like brochures, maps or curriculum materials; audio/visual materials like video and audio tapes, films, or slides; and, interactive multimedia materials, CD-ROM or other computer technology.]</p>
Invasive Species:	An alien species whose introduction causes or is likely to cause environmental harm or economic losses or harm human health. An invasive species is usually an aggressive plant or animal that colonizes a habitat and displaces native and beneficial species.
Invertebrate:	Any animal lacking a backbone or bony segment that encloses the central nerve cord.

Inviolate Sanctuaries for Migratory Birds:	<p>A refuge, or portions thereof, acquired or established in one of the following ways:</p> <ol style="list-style-type: none"> 1. With the approval of the Migratory Bird Conservation Commission (MBCC) for the purpose of an inviolate sanctuary, or for any other management purpose, for migratory birds; or 2. By an instrument or document that states that we are establishing the refuge as an inviolate sanctuary for migratory birds, or for any other management purpose, for migratory birds” under, or to fulfill the purpose of, the Migratory Bird Conservation Act.
Issue:	<p>any unsettled matter that requires a management decision</p> <p>[E.g., a Service initiative, an opportunity, a management problem, a threat to the resources of the unit, a conflict in uses, a public concern, or the presence of an undesirable resource condition.]</p> <p>[N.b. A CCP should document, describe, and analyze issues even if they cannot be resolved during the planning process (FWS Manual 602 FW 1.4).]</p>
Keystone Species:	<p>A species that plays a pivotal role in an ecosystem and upon which a large part of the community depends. A keystone species presence within an ecosystem has a disproportionate effect on other organisms within the system. A keystone species is often a dominant predator whose removal allows a prey population to explode and often decrease overall diversity. Other kinds of keystone species such as beavers, that significantly alter the habitat around them, significantly affect large numbers of other organisms (flora and fauna).</p>
Landform:	<p>The physical shape of the land reflecting geologic structure and geomorphological processes that have shaped the features of a given land surface.</p>
Landscape:	<p>A heterogeneous land area composed of a cluster of interacting ecosystems repeated in similar form throughout; an ecological mosaic of specific ecosystems.</p>
Landscape Management:	<p>Management of nature at a landscape scale that strives to maintain functions and processes that characterize landscape features.</p>
Land Trusts:	<p>organizations dedicated to conserving land by purchase, donation, or conservation easement from landowners.</p>
Lottery Hunt:	<p>opportunities to hunt (deer or waterfowl on Prime Hook NWR) in designated areas where permits for individual dates are randomly issued to participants through a drawing</p>
Macroinvertebrates:	<p>Invertebrates large enough to be seen with the naked eye like most aquatic insects, snails, amphipods, and chironomids. These larger and more prominent invertebrates are extremely important as food resources for waterfowl and shorebirds and other water birds. Abundance and species composition of macroinvertebrates in freshwater streams and waterways is often measured as an indication of negative impacts and stream and watershed health.</p>
Management:	<p>Manipulation of nature for a specific goal.</p>
Marl:	<p>A crumbly mixture of clays, calcium and magnesium carbonates, and remnants of shells that forms in both freshwater and marine environments.</p>

Mast:	seeds and fruits produced by trees and shrubs that are eaten by wildlife.
Matrix:	The most extensive and most connected habitat type in a landscape, which often plays the dominant role in landscape processes.
Memorandum of Understanding:	(MOU) a document describing a bilateral or multilateral agreement between parties.
Mesic:	Relating or adapted to a moderately moist habitat. Mesic soils are sandy-to-clay loams containing moisture-retentive organic matter. Maples, white ash and basswood are mesic plants.
Metapopulation:	A set of partially isolated populations belonging to the same species. A metapopulation has several subpopulations linked together by immigration and emigration. The populations are able to exchange individuals and recolonize sites in which the species has recently become extinct. A metapopulation consists of “a population of populations.”
Metapopulation dynamics.	The processes of recolonization and extinction of subpopulations of a metapopulation. Although individual populations have finite life-spans, the metapopulation as a whole is often stable because immigrants from one population are likely to re-colonize habitat which has been left open by the extinction of another population.
Migratory Birds:	birds that follow a seasonal movement from their breeding grounds to their wintering grounds. Waterfowl, shorebirds, raptors, and songbirds are all migratory birds.
Migratory Nongame Birds of Management Concern:	Species of nongame birds that have undergone significant population declines; have small or restricted populations; or are dependent upon rare and vulnerable habitats. Non-game migratory birds protected by the Migratory Bird Treaty Act (MBTA), make up 88 to 96% of the bird species on the BCC 2002 lists.
Migration:	regular extensive, seasonal movements of birds between their breeding regions and their wintering regions; to pass usually periodically from one region or climate to another for feeding or breeding.
Minimum viable population:	The low end of the viable population range; the smallest isolated population having {x} percent chance of remaining extant for {y} years despite the foreseeable effects of demographic, environmental and genetic random variation and natural catastrophes.
Mitigation:	Actions to compensate for the negative effects if a particular action or project.
Moist-Soil Management (MSM):	Is a native wetland plant management system using water level manipulations to create wet/dry cycles in impounded marsh areas that support early successional herbaceous vegetation which produces large quantities of moist-soil annual seeds, tubers, and other plant parts as highly nutritious food sources for waterfowl and other wildlife. MSM uses the draw down of water levels to promote the germination of native plants on exposed mudflats from late winter, early spring and/or late summer months and subsequent re-flooding of the same areas during early fall waterfowl migration periods.

Monitoring:	The process of collecting information to track changes of selected parameters over time.
Mosaic:	an interconnected patchwork of distinct vegetation types.
Mudflats:	unvegetated areas exposed after drawdown, low tide or natural seasonal drying of wetland areas. Waterfowl, shorebirds, and other birds can forage on invertebrates in these exposed areas.
Mycorrhizal:	The symbiotic association of the mycelium of a fungus with the roots of plants, often trees. The fungus assists in the absorption of minerals and water from the soil and defends the roots from nematodes, while the plant roots provide carbohydrates to the fungus.
National Wildlife Refuge System Improvement Act of 1997:	(Improvement Act) Sets the mission and the administrative policy for all refuges in the National Wildlife Refuge System; defines a unifying mission for the Refuge System; establishes the legitimacy and appropriateness of the six priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation); establishes a formal process for determining appropriateness and compatibility; establish the responsibilities of the Secretary of the Interior for managing and protecting the Refuge System; requires a comprehensive conservation plan for each refuge by the year 2012. This Act amended portions of the Refuge Recreation Act and National Wildlife Refuge System Administration Act of 1966.
National Environmental Policy Act:	(NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in planning and implementing environmental actions.
National Wildlife Refuge Complex:	(Complex) an internal Service Administrative linking of refuge units closely related by their purposes, goals, ecosystem or geopolitical boundaries. In this case, referring to the Coastal Delaware National Wildlife Refuge Complex, which consists of Prime Hook NWR and Bombay Hook NWR.
National Wildlife Refuge System:	Means all lands, waters, and interests administrated by the U. S. Fish and Wildlife Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, coordination areas, and other areas for the protection and conservation of fish and wildlife including those that are threatened with extinction as determined in writing by Presidential or Secretarial order. The determination by the Director may not be delegated.
National Wildlife Refuge System Mission:	Means to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.
Native:	1. (n.) A species that has not been introduced from somewhere else by humans. 2. (adj.) not introduced by humans.
Native Plant:	a plant that has grown in the region since the last glaciation, and occurred before European settlement.

Natural Disturbance Events:	Recurring perturbations such as fires and floods that occur in ecosystems without human intervention.
Natural Range of Variation:	It is recognized that ecosystems are dynamic and complex but ecologists use this term to explain that what they measure or observe within an ecosystem is likely to change over space and time, but within a certain range of variables measured, the ecosystem remains basically recognizable. The natural range of variation refers to the changes within ecosystems that are operating without human influence. More recently ecological restorations use the term “historic range of variation” (HRV). HRV is a recognition that ecosystems have a range within which they are self-sustaining and beyond which they move into a state of disequilibrium. Because many of today’s ecosystems are in an unsustainable state due to modern interventions into their historic processes, finding ways to look back at the factors that made them sustainable is a logical method to proceed in restoring degraded ecosystems.
Neartic:	Relating to the biogeographic subregion that includes Greenland, arctic America, and parts of North America north of tropical Mexico.
Neotropical:	The new world tropical region from southern Mexico and the West Indies to South America.
Niche:	Ecological role of a species in a community.
Non-ambulatory:	not able to walk about
Non-consumptive, wildlife-oriented recreation:	Wildlife observation and photography and environmental education and interpretation.
Nonforested Wetlands:	wetlands dominated by shrubs or emergent vegetation
Non-native species:	see “exotic species.”
Non-point source pollution:	A diffuse form of water quality degradation in which wastes are not released at one specific, identifiable point but from a number of points that are spread out and difficult to identify or control.
Nonpoint Source:	A diffuse form of water quality degradation produced by erosion of land that causes sedimentation of streams, hyper-eutrophication from nutrients and pesticides used in agriculture and silvicultural practices, and by acid rain resulting from burning fuels that contain sulfur.
Nonvascular Plant:	Any of various plants (mosses, liverworts and hornworts) that lack vascular tissue; a bryophyte for example.
Notice of Intent:	(NOI) an announcement we publish in the Federal Register that we will prepare and review an environmental impact statement [40 CFR 1508.22]

Noxious Weed:	A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive or difficult to manage; parasitic; a carrier or host of serious insect or disease; or nonnative, new, or not common to the United States, according to the Federal Noxious Weed Act (PL 93-639), a noxious weed is one that causes disease or had adverse effects on man or the environment and, therefore, is detrimental to the agriculture and commerce of the United States and to the public health.
Objective:	actions to be accomplished to achieve a desired outcome or goal. Objectives are more specific, and generally more measurable, than goals.
Obligate species:	A species that must have access to a particular habitat type to persist.
Observation Platform:	an elevated structure in a designated viewing area.
Other Recreational Use:	a recreational use of the Refuge System that is not one of the six wildlife-dependent recreational uses and which may only be allowed if both appropriate and compatible.
Palustrine:	One of three types of freshwater wetland systems, palustrine wetlands include marshes, bogs, swamps, and small shallow ponds.
Partners for Wildlife Program:	a voluntary, cooperative habitat restoration program among the Service, other government agencies, public and private organizations, and private landowners to improve and protect fish and wildlife habitat on private land while leaving it in private ownership
Partnership:	a contract or agreement among two or more individuals, groups of individuals, organizations, or agencies, in which each agrees to furnish a part of the capital or some service in kind (e.g., labor) for a mutually beneficial enterprise
Party (Hunt) Zone:	a designated deer hunting area that allows two to ten hunters to free roam within the area and not be confined to a permanent deer hunting stand. There are four party hunt zones currently at PHNWR
Passive Management:	protecting, monitoring key resources and conducting baseline inventories to improve our knowledge of the ecosystem
Patch:	A highly localized unit of population and community.
Passerines:	Songbirds.
Pathogens:	Biological agents, such as bacteria and viruses, that cause sickness or disease. Common sources in the Delaware Estuary include wastewater treatment plants, combined sewage overflow, and nonpoint source runoff.

Palynology:	The study of fossil pollen and spores (pollen analysis) and various other microfossils, such as coccoliths and dinoflagellates. Palynology is used in stratigraphy, palaeoclimatology, and archaeology. Pollen and spores are very resistant to decay and therefore their fossils are readily found in sediments and rocks. Spores and pollen are classified according to shape, form of aperture, and both internal and external details of the exine (outer coat). They are indicative of the nature of the dominant flora, and the climatic conditions of the period in which they lived.
Pedestrian Trails:	areas designated for hiking use only and not opened to other modes of transportation such as biking.
Perennial:	Lasting or active through the year or through many years; a plant species that has a life span of more than two years
Permanent Disability:	a permanent physical, mental, or sensory impairment that substantially limits one or more major life activities, such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. See 7 C.F.R. §15e.103; see also 29 U.S.C. § 705(20).
Pest:	Any living organism (plant or animal) that occurs where it is not wanted or that causes damage to crops or humans or other animals.
Phenols:	Any class of organic compounds that contain a hydroxyl group (OH) attached to an aromatic (benzene) ring. Phenols are used in industry to make plastics, detergents, pesticides and drugs. Phenols can be poisonous and carcinogenic to living organisms when found at elevated levels in the environment.
Phenology:	The scientific study of cyclical biological events, such as flowering, breeding, and migration in relation to climatic conditions. Phenological records of the dates on which seasonal phenomena occur provide important information on how climatic change affects ecosystems over time.
Photography Blind:	cf. Observation Platform
<i>Phragmites australis:</i>	A common reed grass, generally considered a pest plant, because of its tendency to replace other valuable native vegetation by forming dense monotypic stands.
PhytoPlankton:	Microscopic algae that are freely floating in aquatic environments and are important links to fish food chains.
Plant:	As defined in the National Wildlife Refuge System Improvement Act (NWRISA), means any member of the plant kingdom in a wild, unconfined state, including any plant community, seed, root, or other part of a plant.
Pleistocene:	The span of geological time preceding the Recent epoch, during which continental glaciers advanced and retreated and the human species evolved. The epoch began about 2.5 million years ago and closed with the end of the Ice Age 10,000 years ago.

Point Source:	A source of pollution that involves discharge of waste from an identifiable point, such as a smokestack or sewage-treatment outflow pipe.
Population:	In biology, any group of organisms belonging to the same species occupying a particular space and time; it incorporates subject areas from ecology, genetics, evolution, demography, behavior, and biostatistics and deals with the fundamental issues of structure and dynamics of biological populations.
Population Monitoring:	Assessing the characteristics of populations to ascertain their status and establish trends on their abundance, condition, distribution, and health.
Population Viability:	Concept of a “viable” population number that represents a threshold for survival versus extinction.
Population Viability Analysis:	(PVA) – Models and numerical estimation procedures to determine the minimum viable population size (MVP) or area (MVA). A PVA recognizes that extinction is subject to chance events and the likelihood of survival must be evaluated in consideration of a specified time frame to be used in conservation planning for endangered species. A population viability analysis can be effectively used in the recovery process of Endangered and Threatened species by supplying information that promotes proactive actions to enhance species recovery, improve our understanding of critical population processes and increase the predictive capabilities of future PVA models. (Bessinger & Westphal 1998)
Preferred Alternative:	This is the alternative determined (by the decision maker) to best achieve the Refuge purpose, vision, and goals; contributes to the Refuge System mission, addresses the significant issues; and is consistent with principles of sound fish and wildlife management.
Prescribed Fire:	the application of fire to wildland fuels, either by natural or intentional ignition to achieve identified land use objectives [FWS Manual 621 FW 1.7]
Prime Hook State Wildlife Management Area:	Owned and managed by the Delaware Division of Fish and Wildlife, this 698-acre area borders the Prime Hook NWR on its northern, eastern, and southern boundaries
Priority Public Use:	On national wildlife refuge lands, a compatible wildlife-dependent recreational use involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation.
Private Land:	land owned by a private individual or group or non-government organization
Proactive Management:	Management of nature that seeks to avert a decline in habitat quality or quantity before an event is likely to occur.
Public:	individuals, organizations, and non-government groups; officials of Federal, State, and local government agencies; Native American tribes, and foreign nations—includes anyone outside the core planning team, those who may or may not have indicated an interest in the issues, and those who do or do not realize that our decisions may affect them

Public Involvement:	offering an opportunity to interested individuals and organizations whom our actions or policies may affect to become informed; soliciting their opinions. We thoroughly study public input, and give it thoughtful consideration in shaping decisions about managing refuges.
Public Land:	land owned by the local, State, or Federal Government
Public Use:	any use of the Refuge System by the public, including, but not limited to, wildlife-dependent recreation and other appropriate uses.
Purposes of a refuge:	Means the purposes specified in or derived from the law, proclamation, executive order, agreement, public land order, or administrative memorandum establishing, authorizing or expanding a national wildlife refuge, unit or subunit.
Quality:	defined by 11 criteria as it relates to wildlife-dependent recreation (605 FW 1-General Guidelines for Wildlife-Dependent Recreation) – 1) Promotes safety of participants, other visitors, and facilities; 2) Promotes compliance with applicable laws and regulations and responsible behavior; 3) Minimizes or eliminates conflict with fish and wildlife population or habitat goals or objectives in an approved plan; 4) Minimizes or eliminates conflicts with other compatible wildlife-dependent recreation; 5) Minimizes conflicts with neighboring landowners; 6) Promotes accessibility and availability to a broad spectrum of the American people; 7) Promotes resource stewardship and conservation; 8) Promotes public understanding and increases public appreciation of America's natural resources and our role in managing and conserving these resources; 9) Provides reliable/reasonable opportunities to experience wildlife; 10) Uses facilities that are accessible to people and blend into the natural setting; and 11) Uses visitor satisfaction to help define and evaluate programs.
Quaternary:	The second period of the Cenozoic era, which began about 2 million years ago. It is subdivided into two epochs—the Pleistocene and Holocene. The beginning of the Quaternary is usually based on the onset of a worldwide cooling. During this period four principle glacial phases occurred in North America and Europe, in which ice advanced towards the equator, separated by interglacial periods marked by warmer climatic conditions. The last glacial ended about 10,000 years ago. Humans became the dominant terrestrial species during the Quaternary. Among the fauna adapted to the colder conditions of the Pleistocene were the mammoth and the woolly rhinoceros.
Ramsar Convention:	A 1973 convention held in Ramsar, Iran which addressed the important of wetlands on an international scale. The main goals of the convention were 1.) “to stem the progressive encroachment of and the loss of wetlands now and in the future;” 2.) to promote habitats which are of international importance to waterfowl; 3.) to coordinate national policies with international action; and 4.) to encourage research and management.
Raptors:	Birds of prey, such as bald eagles, osprey, northern harriers and peregrine falcons.
Rare Species:	Species identified for special management emphasis because of their uncommon occurrence within a particular watershed or ecosystem.

Rare Community Types:	Plant community types classified as rare by any State Natural Heritage Program; includes exemplary community types.
Recharge:	Means water entering an underground aquifer through faults, fractures, or direct absorption.
Record of Decision:	(ROD) is a concise public record of a decision by a Federal agency pursuant to NEPA which includes: the decision; all the alternatives considered; the environmentally preferable alternative; a summary of monitoring and enforcement, where applicable for any mitigation; and, whether all practical means have been adopted to avoid or minimize environmental harm from the alternative selected (or if not, why not).
Recreation Fee Program:	cf. Federal Lands Recreation Enhancement Act
Recreational Visitor Day:	(RVD) A unit of measure equal to one person spending one full day (8 hours) recreating at a particular site. RVDs allow comparisons between visitors who stay for only short periods of time and those who stay longer.
Refuge Goals:	“...descriptive, open-ended, and often broad statements of desired future conditions that convey a purpose but do not define measurable units.” (<i>Writing Refuge Management Goals and Objectives: A Handbook</i>)
Refuge Purposes:	“The terms ‘purposes of the refuge’ and ‘purposes of each refuge’ mean the purposes specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit.” (<i>National Wildlife Refuge System Improvement Act of 1997</i>)
Refuge Lands:	Lands which the Service holds full interest in fee title or partial interest like an easement.
Refuge Management Activity:	Means an activity conducted by the Service or a Service-authorized agent to fulfill one or more purposes of the national wildlife refuge, or the National Wildlife Refuge System mission. We do not require a compatibility determination for refuge management activities as defined by the term “refuge management activity” except for “ refuge management economic activities .” Examples of refuge management activities that do not require a compatibility determination include prescribed burning, water level management, invasive species control; routine scientific monitoring studies, surveys, and censuses; historic preservation activities; law enforcement activities; and maintenance of existing refuge facilities, structures, and improvements. (CD Policy: 603 FW 2.10A)
Refuge Management Economic Activity:	Means a refuge management activity on a national wildlife refuge which results in generation of a commodity which is or can be sold for income or revenue or traded for goods and services. Examples include farming, grazing, haying, and trapping.
Refuge Use:	Any activity on a refuge, except administrative or law enforcement activity carried out by or under the direction of an authorized Service employee.

Refugium:	Area that has escaped from major climatic changes that have occurred within the immediate region and that serves as a refuge for biota that was more widely distributed.
Regular Hunt:	opportunities to hunt on Prime Hook NWR where a one-time annual permit is needed by participants to access designated areas on a first-come, free roam basis
Reintroduction:	Placement of an individual, population, or species back into its historic habitat range after it has been extirpated from that habitat.
Resident/Non-Resident:	Banking with Nature Definition: = People living more than 30 miles from the refuge are defined as non-residents.
Restoration:	Management of a disturbed and/or degraded habitat that results in the recovery of its original features and native plant communities.
Restoration Ecology:	Is the study of renewing degraded, damaged, or destroyed ecosystem function through active human intervention using biological principles and applications in population and community ecology aimed to restore and rehabilitate highly disturbed or degraded ecosystems to their more natural state. There is consensus in the scientific community that the current degradation and destruction of the earth's biota is taking place on a catastrophically short timescale leading to a current extinction rate 1,000 to 10,000 times the normal rate and that habitat loss is the leading cause of both species extinctions and ecosystem dysfunction. Two ways to reverse this trend is conservation of currently viable natural habitats and the restoration of degraded habitats.
Resources of Concern:	All plant and/or animal species, species groups, or communities specifically identified in refuge purposes, system mission or international, national, regional and state plans or acts. For example, shorebirds have been identified a resource of concern at PHNWR as the refuge is a designated site in the Western Hemispheric Shorebird Reserve Network and it will focus on conserving priority shorebird species as identified in the United States Shorebird Conservation Plan, Partners in Flight Plan, the North American Waterfowl Management Plan, the North American Bird Conservation Initiative, the North American Waterbird Conservation Plan, the Delaware Wildlife Management Action Plan and Federal or state threatened and endangered species HMP Policy (620 FW 1.4G). The term “ resources of concern ” and conservation targets are used interchangeably in USFWS policy documents and other literature.
Right-of-Way:	Covers uses that will encumber real property on refuges by granting a right to use and alter the landscape through construction of a facility such as a road, powerline, pipeline, or building (air navigation facility, radio tower, etc.). Generally, such uses are for a relatively long period of time; i.e., 10 years or longer. [340 FW 3]
Riparian:	referring to the interface between freshwater habitats and the terrestrial landscape
Riparian Forested Land:	forested along a stream or river

Riparian Habitat:	Habitat along the banks of a stream or river [cf. note above]
Ruderal:	Of a plant growing in disturbed soil, and so often in waste near human habitation
Runoff:	water from rain, melted snow, or agricultural or landscape irrigation that flows over a land surface into a water body
Sanctuary:	a place of refuge and protection
Scale:	In ecology, referring to hierarchical units of measuring or modeling spatial processes, (like dispersal, niche divergence) or temporal processes (like succession, species guild formation); the magnitude of a region or process; refers to both spatial size like a small-scale patch or a large-scale landscape, and a temporal rate like rapid ecological succession or slow evolutionary speciation.
Scoping:	the process of obtaining information from the public for input into the planning process
Seasonal Closures:	areas and/or trails closed for the protection of wildlife based on their annual life cycles and habitat needs or due to conflicts with other uses. Closures are seasonal and are determined by Refuge staff.
Section 7:	the section of the Endangered Species Act of 1973, as amended, outlines procedures for interagency cooperation to conserve federally listed species and designated critical habitats. Section 7(a)(1) requires Federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires Federal agencies to consult with the Services to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Other paragraphs of this section establish the requirement to conduct conferences on proposed species; allow applicants to initiate early consultation; require FWS and NMFS to prepare biological opinions and issue incidental take statements. Section 7 also establishes procedures for seeking exemptions from the requirements of section 7(a)(2) from the Endangered Species Committee. [ESA §7]
Section 7 Consultation:	the various section 7 processes, including both consultation and conference if proposed species are involved. [50 CFR §402]
Service:	cf. U.S. Fish and Wildlife Service
Shorebird:	Any of a suborder (<i>Charadrii</i>) of birds, such as a plover or a snipe, that frequent the seashore or mud flat areas.
Shrublands:	Habitats dominated by various species of shrubs, often with many grasses, forbs and some trees.
Significance:	As it relates to the <i>Banking on Nature</i> Report, is the total economic activity in a region that is related to a refuge. Significance shows a refuge's role in the regional economy.

Slough:	1.) A depression or hollow, usually filled with deep mud or mire (wet, soggy, muddy ground); 2.) A stagnant swamp, marsh, bog or pond as part of a creek or backwater.
Smart Objectives:	Specific, measurable, achievable, results-oriented and time-fixed (<i>Writing Refuge Management Goals and Objectives: A Handbook</i>).
Snag (Tree):	A partially or fully dead tree that remains standing. Snags provide habitat for a variety of birds and other wildlife.
Sound Professional Judgment:	A finding, determination, or decision that is consistent with principles of sound fish and wildlife management and administration, available science and resources, and adherence to the requirements of the Refuge Administration Act and other applicable laws.
Source Population:	A population in a high-quality habitat where the birth rate greatly exceeds the death rate and the excess individuals emigrate.
Special Use Permit:	(SUP) The issuance of a permit and collection of fees on lands of the National Wildlife Refuge System is authorized by the National Wildlife Refuge System Administration Act (16 U.S. C. 668dd-ee) as amended, and the Refuge Recreation Act (16 U.S. C. 460k-460k-4). A SUP is issued when the public is engaged in the following activities on a national wildlife refuge outside Alaska (Alaska refuges use a different form): agriculture, commercial activities, research/monitoring (does not include research/monitoring by refuge staff as part of normal duties), commercial filming, commercial visitor services, special events, and any other activity not mentioned above. At minimum, the refuge manager should complete an appropriate use decision or, preferably, a compatibility determination for the activity before issuing the Special Use Permit. The refuge manager determines fees according to existing policies and guidance.
Species:	the basic category of biological classification intended to designate a single kind of animal or plant. Any variation among the individuals may be regarded as not affecting the essential sameness which distinguishes them from all other organisms.
Species Assemblage:	The combination of certain species that occur together in a specific location with dependent interactions and certain community characteristics.
Species at Risk:	A species being considered for Federal listing as threatened or endangered, formerly, a "candidate species."
Species Diversity:	A measure of species richness and evenness is often used to quantify species diversity as a numerical comparison between communities. Species diversity increases as the number of species increases and as the number of individuals are more evenly distributed.
Species of Concern:	Species not federally listed as threatened or endangered, but about which we and/or our partners are concerned.
Species Richness:	The measure of species diversity calculated as the total number of species in a habitat or community whereas evenness is defined as the relative abundance of individuals among the recorded species.

Staging and Loafing:	Areas used by waterfowl to rest and increase fat and protein reserves in preparation for migration.
Stand:	an area of trees with a common set of conditions (e.g. based on age, density, species composition, or other features) that allow a single management treatment throughout
State Land:	State-owned public land
State-Listed Species:	cf. “Federal-listed species”
Step-Down Management Plan:	a plan for dealing with specific refuge management subjects, strategies, and schedules, e.g., cropland, wilderness, and fire [FWS Manual 602 FW 1.4]
Stochastic Processes:	Processes with a variable outcome that is random or uncertain. Stochastic processes increase in importance with decreasing or very small population size. Some examples are: Genetic Uncertainty → random changes in genetic make-up due to founder effect, genetic drift, or inbreeding which affects fitness; Environmental Uncertainty → represents unpredictable changes in factors such as weather, food supply, and populations of competitors, predators, and parasites; Natural Catastrophes → represent floods, fires and droughts that occur at random intervals.
Stopover Habitat:	Habitat where birds rest and feed during migration
Strategy:	A specific action, tool, technique, or combination of actions, tools and techniques used to accomplish a refuge’s stated objectives.
Stratigraphy:	The scientific study of rock strata, especially the distribution, deposition, correlation and age of sedimentary rocks. It is the branch of geology concerned with the origin, composition, sequence, and correlation of rock strata. It forms the basis of historical geology and has also found practical application in mineral exploration, especially that of petroleum.
Structural Diversity:	Diversity in a community that results from having many horizontal or vertical physical elements (like layers or tiers of a canopy, or varying heights and densities of forbs and grasses in an early successional “old field”) An increase in laying, tiering, or plant heights and densities leads to an increase in structural diversity.
Structure:	The various horizontal and vertical physical elements of a vegetation community.

Succession:	The more or less predictable change in the composition of communities following a natural or human disturbance. It marks the regular patterns in how plants and other organisms take each other's place or how they "succeed" each other. First comes pioneer species--fast growing, fast-spreading plants adapted to harsher environmental conditions, like sweetgums pioneering poor soils with depleted fertility from intensive agricultural use. In time pioneers build up nitrogen in the soil and provide shade and wind protection for other species to colonize and eventually reverting to mixed hardwood or coniferous stand of trees. There are no absolute rules about succession. It can take a few years or centuries and has no fixed final state.
Successional Management:	Form of management, using habitat management techniques like controlled burning or water level control in marshes that manipulates the successional processes of a community to maintain early stages of plant communities to meet specific wildlife or habitat management objectives, or allowing native communities to revert to later successional stages of development at their own pace.
Successional Meadows:	A large treeless area that is dominated by grasses and small woody and non-woody plants.
Surface Water:	All waters whose surface is naturally exposed to the atmosphere, or wells or other collectors, directly influenced by surface water.
Sustainable Development:	The attempts to meet economic objectives in ways that do not degrade the underlying environmental support system. From a conservation biology perspective it implies that "human activities are conducted in a manner that respects the intrinsic value of the natural world, the role of the natural world in human well-being, and the needs for humans to live on the income from nature's capital rather than the capital itself."
Synergistic:	Producing or capable of producing synergy, or the interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects.
Tax Ditch:	A tax ditch is a governmental subdivision in the state of Delaware. It is a watershed-based organization formed by a prescribed legal process in Superior Court. The organization is comprised by all landowners (called "taxables") of a particular watershed and was primarily devised to drain wetland areas for farming.
Terrestrial:	living on land
Territory:	an are over which an animal or group of animals establishes jurisdiction
Tertiary Period:	The first period of the Cenozoic Era, beginning with the end of the Mesozoic Era (Age of Reptiles) 63 to 65 million years ago and closing with the start of the Pleistocene epoch about 2.5 million years ago; succeeded by the Quaternary period (Pleistocene plus Recent epochs).
Threatened Species:	a Federal-listed, protected species that is likely to become an endangered species in all or a significant portion of its range

Tiering:	Incorporating by reference the general discussions of broad topics in environmental impact statements into narrower statements of environmental analysis by focusing on specific issues.
Tilth:	A measure of the health of soil. Good tilth is a term referring to soil that has the proper structure, and nutrients to grow healthy plants. Soil in good tilth is loamy, nutrient rich soil that can also be said to be friable because optimal soil conditions is represented by a mixture of sand, clay, and organic matter that prevents severe compaction.
Translocation:	(See Reintroduction) – Management technique often used in mitigation for endangered species protection whereby an individual, population, or species is removed from its habitat to be established in another area of similar or identical habitat.
Tributary:	A creek, stream or river that flows into a larger, creek or stream, feeding it water.
Trophic:	The functional classification of organisms in an ecological community based on feeding relationships; the first level includes green plants; the second trophic level includes herbivores; and so on.
Trust Resource:	cf. federal trust resource
Trust Species:	cf. federal trust species
Turbidity:	refers to the extent to which light penetrates a body of water. Turbid waters are those that do not generally support net growth of photosynthetic organisms
Umbrella Species:	Species that require large areas to maintain viable populations and by which protection of their habitat may safeguard the habitat and populations of many other more restricted and less wide ranging species.
Understory:	the lower layer of vegetation in a stand, which may include short trees, shrubs, and herbaceous plants
Unfragmented Habitat:	Large, unbroken blocks of a particular type of habitat.
Upland:	dry ground (i.e., other than wetlands).
Upwelling:	A process whereby nutrient-rich waters from the ocean depths rise to the surface; it commonly occurs along the continental coastlines.

U.S. Fish and Wildlife Service:	(Service, USFWS, FWS) the principal federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages the 93-million-acre National Wildlife Refuge System comprised of more than 530 national wildlife refuges and thousands of waterfowl production areas. It also operates 65 national fish hatcheries and 78 ecological service field stations, the agency enforces federal wildlife laws, manages migratory bird populations, restores national significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the federal aid program that distributes millions of dollars in excise taxes on fishing and hunting equipment to state wildlife agencies.
U.S. Geological Survey:	(USGS) a federal agency whose mission is to provide reliable scientific information to describe and understand the earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.
Validation Monitoring:	Scientific testing of the validity of the models and assumptions upon which a monitoring program is based.
Vascular:	Any of various plants that have vascular tissues xylem and phloem. The vascular plants include all seed-bearing plants (gymnosperms and angiosperms) and the pteridophytes (includes ferns, lycophytes, and horsetails).
Vernal Pool:	Depressions holding water for a temporary period in the spring, and in which various amphibians are highly dependent on for breeding (lays eggs); these depressions often harbor very unique flora and fauna.
Vision Statement:	A concise statement of what a management unit could achieve in the next ten to fifteen years.
Visitors:	A visitor is someone who comes to the refuge and participates in one or more of the activities available at the refuge.
Visitor Services:	Any program provided by the U.S. Fish and Wildlife Service that is specifically or predominately designed for the participation or benefit of visitors.
Visitor Services Review:	an evaluation of a refuge's visitor services program to support the CCP process. The review offers suggestions on addressing issues and opportunities, provides recommendations to assist the station in the development of the site's visitor services program, and provides the refuge staff with a fresh look at the refuge and the programs they manage everyday.
Visits (Visitation):	A visit is not the same as a visitor. One visitor could be responsible for several visits on a refuge. For example, if a family of four went fishing in the morning and then hiked a nature trail in the afternoon, they would have contributed 8 activity visits but only 4 visitors.
Vulnerable species:	Species that are sensitive to human activity because of their life history, appearance, reputation, edibility, location, or other factors.

Wading Birds:	any of many long-legged birds that wade in water in search of food.
Watershed:	A geographic area in which water, sediments, and dissolved materials drain to a common water body. A watershed includes both the land and the body of water into which the land drains.
Water Control Structure:	A device installed to help control water levels and provide an appropriate outlet for discharging water; that can include stoplogs, flaplog, weirs, checkdams, and inline control structures.
Water Level Management:	It is the active management of water elevation within a wetland to mimic natural seasonal hydrology patterns that are attractive to waterfowl and other wetland-dependent wildlife. These manipulations of water levels in the refuge's moist soil and impoundment management units are used to create a mudflat-type environment to attract shorebirds, to concentrate fish for wading birds to feed upon, to stimulate annual vegetation as a food source for waterfowl, and to reduce the number of plants that are low in nutrition for wildlife.
Water Quality Standards:	State regulations which outline permissible levels of individual pollutants in specific bodies of water.
Warm-Season Grass:	Native prairie grass that grows the most during summer, when cool-season grasses are dormant.
Waterfowl:	a category of birds that includes ducks, geese, and swans.
Watershed:	the geographic area within which water drains into a particular river, stream, or body of water; land and the body of water into which land drains
Well Protected:	In CCP analysis, a rare species or community type is considered well protected if 75 percent or more of its occurrence sites are on dedicated open space or protected habitat.
Wetlands:	lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. These areas are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions. "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water."—Cowardin et al 1979
Wet Meadows:	Meadows located in moist, low-lying areas, often dominated by large colonies of native grasses, forbs and wildflowers. Often they are created by beaver dams or exposed pond bottoms. Saltmarsh meadows are subject to daily coastal tides.
Wilderness:	cf. "designated wilderness area"
Wildfire:	a free-burning fire requiring a suppression response; all fire other than prescribed fire that occurs on wildlands [FWS Manual 621 FW 1.7]
Wildland Fire:	every wildland fire is either a wildfire or a prescribed fire [FWS Manual 621 FW 1.3]

Wildland Urban Interface:	roughly defined as the zone where natural areas and development meet.
Wildlife:	the terms “fish,” “wildlife,” and “fish and wildlife” mean any wild member of the animal kingdom, whether alive or dead, and regardless of whether it was bred, hatched, or born in cavity, including its parts, products, eggs, or offspring.
Wildlife-Dependent Recreational Use:	a use of a national wildlife refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation (National Wildlife Refuge System Administration Act of 1966).
Wildlife Management:	manipulating wildlife populations, either directly by regulating the numbers, ages, and sex ratios harvested, or indirectly by providing favorable habitat conditions and alleviating limiting factors
Wildlife-Oriented Recreation:	recreational activities in which wildlife is the focus of the experience [“The terms ‘wildlife-dependent recreation’ and ‘wildlife-dependent recreational use’ mean a use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation.”—National Wildlife Refuge System Improvement Act of 1997]
Xeric:	Characterized by, relating to, or requiring only a small amount of moisture,

Acronyms

Acronym	Full Name
ACJV	Atlantic Coast Joint Venture
ADA	Americans with Disabilities Act
AHWP	Annual Habitat Work Plan
AOE	Area of Emphasis
APHIS	Animal and Plant Health Inspection Service
ASMFC	Atlantic States Marine Fisheries Commission
ATV	All-Terrain Vehicle
BBS	Breeding Bird Survey
BCR	Bird Conservation Region
BIDEH	Biological Integrity, Diversity, and Environmental Health
BMP	Best Management Practices
CBFO	Chesapeake Bay Field Office of the U.S. Fish & Wildlife Service
CCP	Comprehensive Conservation Plan
CEDEC	Central Delaware Economic Development Council
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWD	Chronic Wasting Disease
DDA	Delaware Department of Agriculture
DDT	Dichloro-Diphenyl-Trichloroethane
DEDF&W	Delaware Division of Fish & Wildlife
DELDOT	Delaware Department of Transportation
DNHP	Delaware Natural Heritage Program
DNREC	Delaware Department of Natural Resources & Environmental Control
DU	Ducks Unlimited
EA	Environmental Assessment
EIS	Environmental Impact Statement
ELI	Environmental Law Institute
EPA	Environmental Protection Agency

Acronym	Full Name
ERDG	Ecological Research and Development Group
ESA	Endangered Species Act
FMO	Fire Management Officer
FMP	Fire Management Plan
FMU	Fire Management Unit
FOPH	Friends of Prime Hook National Wildlife Refuge
FY	Fiscal Year
GIS	Geographical Information Systems
GPS	Global Positioning System
GPRA	Government Performance and Results Act
HIP	Harvest Information System
HMP	Habitat Management Plan
IBA	Important Bird Area
ICS	Incident Command System
IMP	Habitat and Species Implementation and Monitoring Plan
IMPLAN	Impact Analysis for Planning
IPM	Integrated Pest Management
LPP	Land Protection Plan
LE	Law Enforcement
LMVJV	Lower Mississippi Valley Joint Venture Migratory Bird Science Team
MMS	Maintenance Management System
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSL	Mean Sea Level
NABCI	North American Bird Conservation Initiative
NAWCP	North American Waterbird Conservation Plan
NAWMP	North American Waterfowl Management Plan and Joint Ventures
NCCEDC	New Castle County Economic Development Council

Acronym	Full Name
NEPA	National Environmental Policy Act
NFDRS	National Fire Danger Rating System
NFPORS	National Fire Plan Operating and Reporting System
NGO	Non-Governmental Organization
NHPA	National Historic Preservation Act
NRCS	Natural Resource Conservation Service
NVCS	National Vegetation Classification System
NWCG	National Wildfire Coordinating Group
NWR	National Wildlife Refuge
NWRA	National Wildlife Refuge Association
NWRIA	National Wildlife Refuge Improvement Act of 1997
NWRS	National Wildlife Refuge System
OMWM	Open Marsh Water Management
ORV	Off-Road Vehicle
PCBs	Polychlorinated Biphenyls
PHNWR	Prime Hook National Wildlife Refuge
PIF	Partners In Flight
PPE	Personal Protective Equipment
PSRAST	Physicians & Scientists for Responsible Application of Science & Technology
PWC	Personal Watercraft
REA	Federal Lands Recreation Enhancement Act
RFMC	Regional Fire Management Coordinator
RLGIS	Refuge Lands Geographical Information System
RM	Refuge Manual
RMAD	Refuge Management Action Database
ROD	Record of Decision
RONs	Refuge Operation Needs System
RRS	Refuge Revenue Sharing

Acronym	Full Name
SAMMS	Service Asset Maintenance Management System
SAV	Submerged Aquatic Vegetation
SCORP	Statewide Comprehensive Outdoor Recreation Plan
Service	United States Fish and Wildlife Service
SHPO	State Historic Preservation Office
SUP	Special Use Permit
TNC	The Nature Conservancy
TWS	The Wildlife Society
US SCP	U.S. Shorebird Conservation Plan
USDA	United States Department of Agriculture
USDOI	United States Department of Interior
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VSP	Visitor Services Professional
WAP	Wildlife Action Plan
WUI	Wildlife-urban interface
YCC	Youth Conservation Corps